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Committee on the Peaceful Uses of Outer Space
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Draft report

Addendum

Chapter III

Recommendations and decisions

C. Report of the Scientific and Technical Subcommittee on its fifty-fifth session

1. The Committee took note with appreciation of the report of the Scientific and Technical Subcommittee on its fifty-fifth session (A/AC.105/1167), which contained the results of its deliberations on the items considered by the Subcommittee in accordance with General Assembly resolution 72/77.

2. The Committee expressed its appreciation to Pontsho Marupiag (South Africa) as Chair for her able leadership during the fifty-fifth session of the Subcommittee.

3. The representatives of Australia, Austria, Argentina, China, Germany, Indonesia, Japan, Pakistan, the Russian Federation, South Africa and the United States made statements under the item. Statements were also made by the representative of Ecuador on behalf of the Group of 77 and China and by the representative of the Plurinational State of Bolivia on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by other member States.

4. The Committee heard the following presentations:

(a) "Satellite-based remote sensing for drought risk reduction on a national level", by the representative of Germany;

(b) "The construction and development of the BeiDou navigation system", by the representative of China;

(c) "The use of ASPOS OKP system in the interests of ensuring the safety of space operations and increasing awareness about the situation in high orbits", by the representative of the Russian Federation;

(d) "A nanosatellite mission for passive reflectometry and dosimetry", by the representative of Austria.

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1. United Nations Programme on Space Applications

(a) Activities of the United Nations Programme on Space Applications

5. The Committee took note of the discussion of the Subcommittee under the item on the activities of the United Nations Programme on Space Applications, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 49–69).

6. The Committee had before it the following:

(a) Report on the United Nations/South Africa Symposium on Basic Space Technology: Small Satellite Missions for Scientific and Technological Advancement (Stellenbosch, South Africa, 11–15 December 2017) (A/AC.105/1180);

(b) Summary of the United Nations/Argentina Workshop on Applications of Global Navigation Satellite Systems (Falda del Carmen, Argentina, 19–23 March 2018) (A/AC.105/2018/CRP.3).

7. The Committee noted that the priority areas of the Programme were environmental monitoring, natural resource management, satellite communications for tele-education and telemedicine applications, disaster risk reduction, the use of global navigation satellite systems (GNSS), the Basic Space Science Initiative, climate change, the Basic Space Technology Initiative and the Human Space Technology Initiative, and biodiversity and ecosystems.

8. The Committee took note of the activities of the Programme carried out in 2017 and planned in 2018, as presented in the report of the Subcommittee (A/AC.105/1167, paras. 63–65).

9. The Committee noted that the Government of Japan, through the Kyushu Institute of Technology, and the Politecnico di Torino and Instituto Superiore Mario Boella, in collaboration with the Istituto Nazionale di Ricerca Metrologica, had continued to provide long-term fellowship programme opportunities for students from developing countries under the United Nations/Japan Long-term Fellowship Programme on Nanosatellite Technologies, and the United Nations/Italy Long-term Fellowship Programme on Global Navigation Satellite Systems and Related Applications, respectively.

10. The Committee also noted the Drop Tower Experiment Series, which was a fellowship programme of the Office for Outer Space Affairs, undertaken in collaboration with the Center of Applied Space Technology and Microgravity and DLR, in which students could study microgravity by performing experiments in a drop tower. In the fourth cycle of the fellowship programme, a team from the Warsaw University of Technology had been awarded the fellowship through competitive selection. A new, fifth cycle was under way.

11. The Committee further noted the continued collaboration between the Office for Outer Space Affairs and the Government of Japan, in collaboration with JAXA, in implementing the United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station Japanese Experiment Module (Kibo), known as "KiboCUBE". The programme had been launched in September 2015. After the selection of the team from the University of Nairobi for the first round, a team from the Universidad del Valle of Guatemala had been selected for the second round, and the Mauritius Research Council operating under the aegis of the Ministry of Technology, Communication and Innovation had been selected for the third round; applications for the fourth round, to be held in 2019 and 2020, would be announced later in 2020. The objective of the Cooperation Programme was to promote international cooperation and capacity-building in space technology and its applications under the Human Space Technology Initiative by providing opportunities for educational and research institutions in developing countries to deploy small satellites (CubeSats) from the Japanese Experiment Module (Kibo).

12. The Committee expressed its appreciation to the Office for Outer Space Affairs for the manner in which the activities of the Programme had been implemented with

the limited funds available. The Committee also expressed its appreciation to the Governments and intergovernmental and non-governmental organizations that had sponsored the activities. The Committee noted with satisfaction that further progress was being made in the implementation of the activities of the Programme for 2018.

13. The Committee once again expressed its concern that the financial resources available to the United Nations Programme on Space Applications remained limited and appealed to the donor community to support the Programme through voluntary contributions.

14. The Committee requested the Office to continue to work with the Scientific and Technical Subcommittee on defining the priorities of the Programme.

15. The Committee noted with satisfaction that the United Nations Programme on Space Applications had continued to emphasize, promote and foster cooperation with Member States at the regional and global levels to support the regional centres for space science and technology education, affiliated to the United Nations.

16. The Committee noted that the Office for Outer Space Affairs continued to closely collaborate with the regional centres for space science and technology education, affiliated to the United Nations, namely the African Regional Centre for Space Science and Technology Education — in English Language; the African Regional Centre for Space Science and Technology — in French Language; the Centre for Space Science and Technology Education in Asia and the Pacific; the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean; the Regional Centre for Space Science and Technology Education for Western Asia; and the Regional Centre for Space Science and Technology Education in Asia and the Pacific (China). In that connection, the Committee noted with appreciation that the host countries of the regional centres for space science and technology education, affiliated to the United Nations, were providing significant financial and in-kind support to the centres.

17. Some delegations expressed the view that it was imperative to redouble the efforts to extend to all States the benefits derived from outer space activities, and that in line with the enhancement of international cooperation in outer space activities, it would be vital to promote the wider participation of developing countries through active assistance by advanced spacefaring nations and the Office for Outer Space Affairs. In that connection, the delegations expressing that view were also of the view that capacity-building and technical assistance were key factors in the expansion of the abilities of those working in the field, permitting them to gain expertise and knowledge from nations with experience in outer space activities.

18. The Committee noted the important role of the Programme in supporting capacity-building in space science technology and its applications, particularly in developing countries.

(b) International Satellite System for Search and Rescue

19. The Committee noted with satisfaction that the International Satellite System for Search and Rescue currently had 40 member States and two participating organizations and that other entities were also interested in becoming associated with the programme in the future. The Committee noted with appreciation that the worldwide coverage for emergency beacons, carried on vessels and aircraft and by individual users around the world, had been made possible by the space segment, which consisted of transponders carried on 5 polar-orbiting, 5 geostationary and 30 newly added medium Earth orbit satellites (plus 4 upcoming ones) provided by Canada, France, India, the Russian Federation and the United States, along with the European Organization for the Exploitation of Meteorological Satellites, as well as by the ground-segment contributions of 29 other countries. The Committee also noted that, in 2017, alert data from the system had helped to save more than 2,000 lives in 876 search and rescue events worldwide.

2. Space technology for sustainable socioeconomic development

20. The Committee took note of the discussion of the Subcommittee under the item on space technology for sustainable socioeconomic development, as reflected in the report of the Scientific and Technical Subcommittee (A/AC.105/1167, paras. 76–96).

21. The Committee endorsed the recommendations and decisions on the item made by the Subcommittee and its Working Group of the Whole (A/AC.105/1167, para. 96).

22. The Committee recalled that the General Assembly, in its resolution 72/77, had reiterated the need to promote the benefits of space technology and its applications in the major United Nations conferences and summits for economic, social and cultural development and related fields, and had recognized that the fundamental significance of space science and technology and their applications for global, regional, national and local sustainable development processes should be promoted in the formulation of policies and programmes of action and their implementation, including through efforts towards achieving the objectives of those conferences and summits and in implementing the 2030 Agenda for Sustainable Development.

23. The Committee noted the crucial role of space data and technology in the public health domain and welcomed the establishment of a new item entitled "Space and global health" on the agenda of the Subcommittee, under a multi-year workplan, and that a working group had been established under that item, with Antoine Geissbühler (Switzerland) as Chair.

3. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment

24. The Committee took note of the discussion of the Subcommittee under the item on matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 97–111).

25. The Committee noted the international and regional initiatives undertaken to promote and use remote sensing data to support socioeconomic and sustainable development, in particular for the benefit of developing countries.

26. In the course of discussions, delegations reviewed national and international cooperation programmes in a number of key areas in which remote sensing data were crucial for well-informed decision-making. Examples included greenhouse gas emission monitoring from space; various monitoring and visualization platforms; air quality monitoring for aerosols and pollutants; monitoring of atmospheric processes; climate change, including essential climate variables monitoring; disaster management and vulnerability assessments; ozone loss; natural resource management; ecosystems management; forestry; hydrology; meteorology and severe weather forecasting; land use and land cover change monitoring; sea surface temperature and wind monitoring; environmental change; glacier mapping and studies; crop and soil monitoring; irrigation; precision agriculture; groundwater detection; space weather; health impacts; security; law enforcement; mineral mapping; and urban development.

27. Some delegations expressed the view that it was important to ensure that the Office for Outer Space Affairs was empowered with the necessary resources to assist a greater number of countries in gaining access to the benefits of space science and technology and its applications, and that not having the Office integrated into the United Nations development system affected its access to funds to support cooperation programmes, despite the successful activities carried out in 2017 under the Programme on Space Applications in collaboration with Member States and other international organizations.

28. Some delegations expressed the view that the development of applications based on remote sensing greatly contributed to the achievement of the 2030 Agenda for Sustainable Development and in realizing the Sustainable Development Goals, in particular for addressing the triple challenges of poverty, inequality and

unemployment in Africa, where space solutions such as for precision agriculture or water management were seen as very important to implement and promote.

29. The Committee noted that while the relevance and use of remote sensing technology and other space science and technology applications was continuously increasing, greater capacity-building was also needed, in particular in developing countries, to effectively incorporate and apply such technologies and solutions in planning and development decision-making processes. The increasing number of workshops and training opportunities offered in that domain was seen as beneficial.

30. The Committee noted the important role played by the Group on Earth Observations (GEO) and the Committee on Earth Observation Satellites (CEOS) in improving the sharing of remote sensing data and worldwide access to data, and also noted the strong commitment of many Member States to supporting those initiatives.

31. The Committee also took note of important cooperative efforts such as the BRICS Remote Sensing Satellite Constellation to enhance cooperation for the sharing and exchange of remote sensing data to meet the current and future challenges of sustainable development and the cooperation between the Office for Outer Space Affairs and PSIPW with regard to the advancement of space science and technology to address the growing problem of water scarcity around the globe.

32. The Committee noted that in the framework of APSCO, the Data Sharing Service Platform had provided remote sensing data from nine Chinese Earth observation satellites, with more than 400,000 satellite images already acquired and some 8,000 images used for research work and disaster management, and with a second phase of the Platform planned to expand its resources.

33. The Committee also noted that a number of Member States continue to implement Earth observation programmes driven by user needs and primarily aimed at the societal needs of their respective countries, with numerous Earth observation satellites in orbit or planned to be launched, whether for the high-resolution optical imagery, synthetic aperture radar images or meteorological imagery, aiming at addressing important national priorities such as agriculture and crop inventory or better weather forecasting.

4. Space debris

34. The Committee took note of the discussion of the Subcommittee under the item on space debris, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 112–146).

35. The Committee endorsed the decisions and recommendations of the Subcommittee on the item (A/AC.105/1167, paras. 145 and 146).

36. The Committee noted with satisfaction that the endorsement by the General Assembly, in its resolution 62/217, of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, was instrumental for mitigation of space debris, and urged those countries that had not yet done so to consider implementing the Guidelines on a voluntary basis.

37. The Committee noted with appreciation that many States and international intergovernmental organizations were already implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines of the Committee and/or the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines, and that other States had developed their own space debris mitigation standards based on those guidelines.

38. In addition, the Committee noted that some States were using the Space Debris Mitigation Guidelines of the Committee and/or the IADC Space Debris Mitigation Guidelines, the European Code of Conduct for Space Debris Mitigation, International Organization for Standardization standard 24113:2011 (Space systems: space debris mitigation requirements), and ITU recommendation ITU-R S.1003 (Environmental protection of the geostationary-satellite orbit) as reference points in their regulatory

frameworks for national space activities. The Committee also noted that some States had cooperated in the space surveillance and tracking support framework funded by the European Union and in the ESA space situational awareness programme.

39. The Committee noted that an increasing number of States were adopting concrete measures to mitigate space debris, including the improvement of the design of launch vehicles and spacecraft, the de-orbiting of satellites, passivation, life extension, end-of-life operations and the development of specific software and models for space debris mitigation.

40. Some delegations expressed the view that the mitigation of space debris and the limitation of its creation should be among the priorities of the work of the Committee and its subsidiary bodies.

41. Some delegations expressed the view that the registration of space objects and their parts, including those that were no longer functional, was particularly important to ensure the safety of missions in orbit, access to basic services and the long-term sustainability of outer space activities.

42. Some delegations expressed the view that there was a need for the detection, tracking, monitoring and reduction of space debris and for the elimination of that debris.

43. Some delegations expressed the view that there was a need for differentiated responsibility in the clearing of space debris in line with the space activities of each Member State.

44. Some delegations expressed the view that the issue of space debris should be addressed in a manner that would not jeopardize the development of the space capabilities of developing countries.

45. Some delegations expressed the view that measures taken to address the issue of space debris should not impose an undue burden on the space programmes of developing nations.

46. The view was expressed that the space debris issue should be addressed in a manner that would ensure that the cost of the debris removal process was not passed on to countries with emerging space capabilities.

47. The view was expressed that criteria and procedures for active removal or intentional destruction of space objects, either functioning or non-functioning, needed to be thoroughly deliberated under the auspices of the United Nations in order to guarantee the effectiveness of the measures and ensure that they were accepted by stakeholders.

5. Space-system-based disaster management support

48. The Committee took note of the discussion of the Subcommittee under the item on space-system-based disaster management support, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 147–167).

49. The Committee welcomed the activities organized by the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) aimed at promoting greater understanding, acceptance and commitment by countries with respect to ways of accessing and developing capacity to use all types of space-based information in support of the full disaster management cycle. In that regard, the Committee took note of the UN-SPIDER technical advisory services and the UN-SPIDER knowledge portal (www.un-spider.org), a web-based platform for information, communication and process support that fostered the exchange of information, the sharing of experiences, capacity-building and technical advisory support.

50. Some delegations called upon the Office for Outer Space Affairs, through UN-SPIDER, to intensify its capacity-building activities through technical advisory

missions and training programmes, in particular in developing countries, to strengthen disaster risk preparedness and emergency response at the national level.

51. In her statement, the Director of the Office for Outer Space Affairs thanked the Governments of Austria, China and Germany for their commitment to and support of UN-SPIDER since its inception, including through the implementation of UN-SPIDER activities coordinated by the UN-SPIDER offices in Bonn, Germany, Beijing and Vienna.

52. The Committee noted with appreciation that the UN-SPIDER regional support offices were a strong pillar of UN-SPIDER and contributed to the programme's activities in the areas of capacity-building, institutional strengthening and knowledge management.

53. The Committee noted that UN-SPIDER would participate in the Asian Ministerial Conference on Disaster Risk Reduction to be held in Mongolia in July 2018, and hold its eighth annual conference in Beijing in October 2018 as one of the commitments of the Office for Outer Space Affairs to supporting the implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030.

54. The Committee also noted the valuable contribution of the ongoing activities of Member States to increase the availability and use of space-based solutions in support of disaster management, including the Sentinel Asia project and its coordination of emergency observation requests through the Asian Disaster Reduction Centre, the emergency mapping service of the European Earth Observation Programme (Copernicus) and the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters (also called the International Charter "Space and Major Disasters").

6. Recent developments in global navigation satellite systems

55. The Committee took note of the discussion of the Subcommittee under the item on recent developments in global navigation satellite systems, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 168–193).

56. The Committee noted that the International Committee on Global Navigation Satellite Systems (ICG) continued its successful annual meetings aimed at bringing together the providers and users of GNSS to promote its use and integration into infrastructures, particularly in developing countries.

57. The Committee noted that the United States remained engaged in activities to ensure compatibility and interoperability among the different services.

58. It was also noted that the European Union's Galileo satellite navigation system was expected to be fully operational in 2020, and was intended to improve services and provide new business opportunities in a wide variety of applications in many sectors of the economy worldwide.

59. The Committee noted that through its development and deployment of the BeiDou Navigation Satellite System (BDS), China had been actively participating in implementing the goals of ICG, and that a model of the BDS-3 satellite had been donated to the Office.

60. The Committee noted that the United Nations/Argentina Workshop on Applications of Global Navigation Satellite Systems had been held in Falda del Carmen, Argentina, from 19 to 23 March 2018. The National Commission for Space Activities (CONAE) of Argentina had hosted the Workshop on behalf of the Government of Argentina. The Workshop's overarching objective had been to facilitate cooperation in applying GNSS solutions through the exchange of information and the scaling-up of capacities among countries in the region.

61. The Committee expressed its appreciation to the Office for Outer Space Affairs for its continued support as the executive secretariat of ICG and its Providers' Forum, and for the organization of workshops and training courses focusing on

capacity-building in the use of GNSS-related technologies in various fields of science and industry.

7. Space weather

62. The Committee took note of the discussion of the Subcommittee under the item on space weather, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 194–210).

63. The Committee noted that space weather was addressed under UNISPACE+50 thematic priority 4 (International framework for space weather services) (A/AC.105/1171) and noted with appreciation the work by the Expert Group on Space Weather of the Scientific and Technical Subcommittee as the implementation mechanism for that thematic priority.

64. The Committee noted that the Expert Group had held meetings on the margins of the fifty-fifth session of the Scientific and Technical Subcommittee, in 2018, as well as intersessionally, with the aim, among other things, of stressing the importance of thematic priority 4, and the need for a new international coordination group that could deliver improved international collaboration and coordination for improved space weather services and ultimately enhance global resiliency against the adverse effects of space weather.

65. The Committee welcomed the extension of the mandate of the Expert Group on Space Weather to 2021.

66. The Committee noted that the Office had aligned the space weather-related activities it implemented through its capacity-building efforts and those it carried out in its capacity as the executive secretariat of ICG.

67. The view was expressed that in relation to a priority activity of the Expert Group on Space Weather on the establishment of an international coordination group for space weather, in close collaboration with COSPAR, WMO, the International Civil Aviation Organization and the International Space Environmental Service, the structure and the working mechanism of such a group could be elaborated only in the course of the implementation of specific joint projects by the participating entities.

8. Near-Earth objects

68. The Committee took note of the discussion of the Subcommittee under the item on near-Earth objects, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 211–233).

69. The Committee noted with appreciation the progress made by the International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG), which had been established in 2014 pursuant to recommendations on an international response to the near-Earth object impact threat endorsed by the Committee on the Peaceful Uses of Outer Space at its fifty-sixth session and welcomed by the General Assembly in its resolution 68/75. The Committee noted the status of IAWN and SMPAG activities since their last reporting to the Scientific and Technical Subcommittee (as contained in paras. 213–216; 220–230 and 233 of document A/AC.105/1167).

70. The Committee further noted the importance of work carried out by the SMPAG Ad Hoc Working Group on Legal Issues, which had been established in 2016 and was coordinated by DLR, and which continued to consider legal issues relevant to the work of SMPAG in the context of existing international treaties governing activities in outer space.

71. The Committee noted that the IAWN steering committee had held its fifth meeting on 30 January 2018, on the margins of the fifty-fifth session of the Scientific and Technical Subcommittee, and that there were five new signatories to the Statement of Intent for Participation in IAWN, bringing the total number of signatories to 13. The signatories represented observatories and space institutions

from China, Colombia, Mexico, the Republic of Korea, the Russian Federation and the United States, as well as Europe, and even included an amateur observer from the United Kingdom. A new web page was being launched by IAWN, hosted by the University of Maryland (United States), and was available at http://iawn.net.

72. The Committee also noted that, since the fifty-fourth session of the Scientific and Technical Subcommittee, SMPAG had held two meetings: its ninth meeting had been held in Toulouse, France, on 11 October 2017 and had been hosted by CNES; and its tenth meeting had been held on 31 January 2018, on the margins of the fifty-fifth session of the Subcommittee. Both meetings had been supported by the Office for Outer Space Affairs in its role as the secretariat of SMPAG, pursuant to General Assembly resolution 71/90. The Committee noted the progress made under the SMPAG workplan, as contained in the reports on those meetings, available at http://smpag.net.

73. The Committee further noted that the Austrian Research Promotion Agency (FFG) and the China National Space Administration (CNSA) had become members of SMPAG, and that the European Southern Observatory had become the fifth permanent observer of the Group. SMPAG currently had 18 members (space agencies) and 5 permanent observers (other entities).

74. The Committee noted that ESA, the current SMPAG Chair, had been elected as Chair for another two-year term (2018–2020).

75. The Committee noted that IAWN and SMPAG were continuing to work with the Office for Outer Space Affairs on issues related to general communication on near-Earth objects to the public, communication with Member States in the event of an impact warning and the possibility of including a near-Earth object module as part of the Office's UN-SPIDER technical advisory missions on disaster preparedness. The latter was related to the work of IAWN to provide information to relevant parties, such as emergency response agencies.

76. The Committee noted that the next meetings of IAWN and SMPAG would be held in Knoxville, Tennessee, United States, on 18 and 19 October 2018, in conjunction with the meeting of the Division for Planetary Sciences of the American Astronomical Society, to be held from 21 to 26 October 2018.

77. The Committee noted with appreciation the United Nations publication entitled "Near-Earth objects and planetary defence" (ST/SPACE/73), jointly produced by IAWN, SMPAG and the Office for Outer Space Affairs, outlining the work in the area of strengthening international cooperation in mitigating a potential near-Earth object threat, and which had been made available at the sixty-first session of the Committee.

9. Use of nuclear power sources in outer space

78. The Committee took note of the discussion of the Subcommittee under the item on the use of nuclear power sources in outer space, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 234–251).

79. The Committee endorsed the report and recommendations of the Subcommittee and the Working Group on the Use of Nuclear Power Sources in Outer Space, reconvened under the chairmanship of Sam A. Harbison (United Kingdom) (A/AC.105/1167, para. 251, and annex II).

80. The Committee acknowledged that some States and an international intergovernmental organization were developing, or considering developing, legal and regulatory instruments on the safety of the use of nuclear power sources in outer space, taking into account the contents and requirements of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space and of the Safety Framework for Nuclear Power Source Applications in Outer Space.

81. The Committee stressed the value and importance of implementing the voluntary Safety Framework for Nuclear Power Source Applications in Outer Space,

which had been developed by the Subcommittee together with the International Atomic Energy Agency.

82. Some delegations expressed the view that the risk of potential collisions of nuclear-powered space objects in orbit and the incidents or emergencies that could be created by the accidental re-entry of such objects into the Earth's atmosphere, as well as their impact on the ecosystem, was a matter of concern. In that connection, the delegations expressing that view were also of the view that more attention should be given to those issues through adequate strategies, long-term planning and regulations, including the Safety Framework for Nuclear Power Sources Applications in Outer Space.

10. Long-term sustainability of outer space activities

83. [...].

11. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of the International Telecommunication Union

84. The Committee took note of the discussion of the Subcommittee under the item on the examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of ITU, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 275–289).

85. Some delegations expressed the view that the geostationary orbit, a limited natural resource clearly in danger of saturation, must be used rationally, efficiently and economically, in conformity with the provisions of the ITU Radio Regulations, so that countries or groups of countries may have equitable access to those orbits and frequencies, taking into account the special needs of the developing countries and the geographical situation of particular countries. Further, the geostationary orbit was not subject to national appropriation by claim of sovereignty, by means of use, repeated use or occupation, or by any other means, and that its utilization should be governed by applicable international law, including the Outer Space Treaty as well as instruments and regulations of ITU.

86. Some delegations expressed the view that the utilization by States of the geostationary orbit on the basis of "first come, first served" was unacceptable and that the Subcommittee, with the involvement of ITU, should develop a regime guaranteeing equitable access to orbital positions for all States. The delegations expressing that view were also of the view that the current system of reserving slots in the geostationary orbit was being abused by a number of satellite operators, and that the first step in addressing the issue could be the establishment of communication between the Subcommittee and ITU-R Study Group 4, for the inclusion of an item on increasing the efficiency of the use of the geostationary orbit on the agenda of the World Radio Communication Conference to be held in 2019.

87. The view was expressed that consideration should be given to the possibility of amending the name of this agenda item by adding "and non-geostationary", thus expanding the scope of the item to include geostationary and non-geostationary orbits.

12. Draft provisional agenda for the fifty-sixth session of the Scientific and Technical Subcommittee

88. The Committee took note of the discussion of the Subcommittee under the item on the draft provisional agenda for its fifty-sixth session, as reflected in the report of the Subcommittee (A/AC.105/1167, paras. 290–294).

89. The Committee endorsed the recommendations and decisions on the item made by the Subcommittee (A/AC.105/1167, paras. 291–293).

90. On the basis of the deliberations of the Subcommittee at its fifty-fifth session, the Committee agreed that the following items should be considered by the Subcommittee at its fifty-sixth session:

1. Adoption of the agenda.
2. Statement by the Chair.
3. General exchange of views and introduction of reports submitted on national activities.
4. United Nations Programme on Space Applications.
5. Space technology for sustainable socioeconomic development.
6. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment.
7. Space debris.
8. Space-system-based disaster management support.
9. Recent developments in global navigation satellite systems.
10. Space weather.
11. Near-Earth objects.
12. Long-term sustainability of outer space activities.
13. Use of nuclear power sources in outer space.

    (Work for 2019 as reflected in the multi-year workplan of the Working Group (A/AC.105/1138, para. 237 and annex II, para. 9))
14. Space and global health.

    (Work under a multi-year workplan of the Working Group to be determined (A/AC.105/1167, para. 96 and annex I, para. 14))
15. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of the International Telecommunication Union.

    (Single issue/item for discussion)
16. Draft provisional agenda for the fifty-seventh session of the Scientific and Technical Subcommittee, including identification of subjects to be dealt with as single issues/items for discussion or under multi-year workplans.
17. Report to the Committee on the Peaceful Uses of Outer Space.

91. The Committee agreed that the Working Group of the Whole and the Working Group on the Use of Nuclear Power Sources in Outer Space should be reconvened at the fifty-sixth session of the Scientific and Technical Subcommittee.

92. The Committee also agreed that a working group under the item on space and global health, with Antoine Geissbühler (Switzerland) as Chair, should be convened at the fifty-sixth session of the Subcommittee. The Committee further agreed that the Chair of the newly established working group, together with the Secretariat, would present to the fifty-sixth session of the Subcommittee, in 2019, a proposal for a multi-year workplan for that working group, taking into account the role of the Expert Group on Space and Global Health.

93. The Committee agreed that, in accordance with the agreement reached at the forty-fourth session of the Scientific and Technical Subcommittee, in 2007 (A/AC.105/890, annex I, para. 24), the symposium at the fifty-sixth session of the Subcommittee, in 2019, was to be organized by COSPAR on the topic "Space weather and small satellites".